

ABSTRACT OF THE DISCLOSURE

A process for removing thiethionylfluoride from a composition containing sulfur tetrafluoride and thiethionylfluoride includes contacting the composition with a high surface area material, such as activated carbon. The process can provide purified sulfur tetrafluoride free of thiethionylfluoride. The high surface area material can be replaced for further processing. Alternatively, the material can be regenerated by contacting it with a gas mixture of oxygen and nitrogen at 150-450°C and converting the adsorbed elemental sulfur to sulfur dioxide without oxidation of the material.

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